

## **REMARKS**

This paper is filed in response to the official action dated May 14, 2009, in the above-referenced application. This paper is timely filed

Claims 1-24 are pending. By the foregoing, claims 1, 3, 12, and 19 have been amended, and claims 4 and 5 have been canceled without prejudice or disclaimer. Claim 1 has been amended to recite the limitation of claim 5. Claims 3 and 12 have been amended to address matters of form. Claim 19 has been amended to correct a typographical error introduced upon entry into the U.S. national phase. No new matter has been added.

The claim rejections are addressed below in the order presented in the official action. Reconsideration of the application, as amended and in view of the following remarks, is solicited.

### **CLAIM REJECTIONS 35 U.S.C. §112, 2nd PARAGRAPH**

Claims 3 and 12 have been rejected under U.S.C. §112, 2<sup>nd</sup> paragraph as assertedly indefinite. It is respectfully submitted that the antecedent basis informalities did not render claims 3 and 12 indefinite under § 112, second paragraph. Nonetheless, the rejections have been overcome and should be removed.

### **CLAIM REJECTIONS 35 U.S.C. §103**

Claims 1-24 have been variously rejected under U.S.C. §103(a) as assertedly obvious over Aziz *et al.*, EP 1 178 546 (“Aziz”) in view of Lee *et al.*, *Synthetic Metals*, 117:249-251 (2001) (“Lee 1”) and/or Lee *et al.*, *Adv. Mater.*, 12(11):801-804 (2000) (“Lee 2”) optionally in further view of Towns *et al.*, International Patent Publication No. WO 01/62869 (“Towns”), Hirai, U.S. Publication No. 2001/0028962 (“Hirai”), or Roach *et al.*, U.S. Publication No. 2001/0055454 (“Roach”). The applicants respectfully traverse the rejections.

Lee 2 discloses “baking” a MEH-PPV polymer layer at 60°C, which is below its glass transition temperature of 65°C, to remove residual solvent after film casting. *See* the paragraph bridging the first and second columns of page 801. After this baking step, further “annealing” is performed – both pre-deposition of the electrode and post-deposition of the electrode. Both annealing steps are performed at temperatures above the glass transition temperature of the polymer. *See* the first full

paragraph of the second column of page 801, and the first full paragraph of the second column of page 803. Moreover, Lee 2 teaches that “heat treatments below the  $T_g$  cannot change the electrical properties because they do not alter the morphology of the emissive polymer,” and contrasts such heat treatments below the  $T_g$  with annealing the polymer film above the  $T_g$ . *See* the first and second full paragraphs of the second column of page 801.

The same baking and annealing procedure was performed in Lee 1. *See* the paragraph bridging the first and second columns of page 249, and the section entitled “2. Experimental” bridging pages 249 and 250. Thus, both Lee 1 and Lee 2 teach away from annealing at or below the polymer  $T_g$  both before and after formation of the second electrode, as claimed.

Aziz fails to disclose heating the polymer before electrode deposition, but teaches annealing an “as-fabricated” organic light emitting device at a temperature below the  $T_g$  of the material having the lowest below the  $T_g$  in the device.

Nonetheless, one of ordinary skill would not be motivated to combine the teachings of Aziz and Lee 1 and Lee 2 in view of the explicit teaching in Lee 2 that “heat treatments below the  $T_g$  cannot change the electrical properties because they do not alter the morphology of the emissive polymer.”

The other cited documents fail to address the aforementioned deficiencies.

In view of the foregoing, a *prima facie* case of obviousness cannot be sustained.

**CONCLUSION**

Should the examiner wish to discuss the foregoing, or any matter of form or procedure in an effort to advance this application to allowance, the examiner is respectfully invited to contact the undersigned attorney at the indicated telephone number.

Respectfully submitted,

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